

## BEAST Examination Categories

### Crime Scene

CSI	Crime Scene Investigation <i>Collecting, documenting, and managing physical evidence from scene of crime</i>
CSR	Crime Scene Reconstruction <i>Determination of most probable sequence of events</i>
VEH	Vehicle Inventory/Search <i>Inventory of items taken from vehicle search</i>
VEP	Vehicle Processing <i>Collecting, documenting, and managing physical evidence from a vehicle</i>

### Biology Section

BIO	Biology <i>Examination of evidence for the presence of biological materials such as blood, semen, and saliva; DNA analysis of evidence samples and known reference samples</i>
CODIS	Combined DNA Index System <i>DNA profile search of databases (State and National) to generate investigative lead through a DNA profile match; searchable indexes are: offender, forensic (casework), missing persons, unidentified human remains, and biological relatives of missing persons For SDFL use only.</i>

### Firearms Section

FA	Firearms Identification <i>Analysis of fired cartridge and/or shot shell components to determine the possible type of firearm involved. Includes comparison to recovered and submitted firearms</i>
BTE	Bullet Trajectory <i>Analysis to determine the pathway or trajectory bullets take during short and distant travel</i>
EPT	Ejection Pattern Test <i>Analysis to determine how a particular firearm arrays the fired cartridge cases ejected from it</i>
FUN	Functionality Test <i>Analysis to determine functionality and operability of firearm. Includes trigger pressure analysis to determine the amount of force required to actuate the firing mechanism</i>
GSR	Gun Shot Residue <i>Analysis of GSR (primer residues) kits taken from suspect's hands or other evidence items e.g. clothing, vehicle interiors to determine whether or not an individual has discharged a firearm or were in close proximity of a discharged firearm.</i>
MUZ	Muzzle to Target <i>Analysis to determine the distance between firearm and target (all types of firearms including shotgun and shot pattern evidence). Includes visible and non-visible GSR (smoke, soot, burned and partially burned gunpowder particles) analysis. This type of GSR analysis is different from the GSR (primer residues) analysis performed on GSR kits collected from a suspect's hands and/or other evidence surfaces (listed above).</i>
NIB	National Integrated Ballistics Identification Network <i>The input of characteristics of expended ammunition into a national computer data base for comparison purposes</i>
POA	Point of Aim <i>Analysis to determine the accuracy and precision of a firearm's sights to the point of aim</i>

SNR	Serial Number Restoration <i>Restoration of erased and/or obliterated serial numbers</i>
TM	Tool Mark <i>Comparison of tool marks left at a crime scene to known standards produced by the suspect tool</i>
FC	Firearms Collection <i>Per SDCL 23A-37-13, describes controlled firearms and weapons disposal</i>
BAL	Ballistics <i>Analysis not included in any of the other examination categories, e.g. chemical examinations to determine the presence of bullet material residues (lead, copper, etc), order of shots (e.g. glass), measuring muzzle velocity and energy, determining bullet entrance vs. exit, terminal ballistics (projectile behavior on a target and/or target behavior on a projectile)</i>

#### Trace Section

CHE	Chemical <i>Analysis to determine the identification of unknown substance</i>
FIB	Fiber <i>Analysis to determine the identification of fiber type; comparison of known and unknown fibers samples</i>
GLA	Glass <i>Analysis to determine if two samples come from same source; fracture matching</i>
HAI	Hair <i>Analysis to determine hair species &amp; origin</i>
SOI	Soil <i>Analysis to determine composition of suspect soil</i>
PRO	Protective Coating <i>Analysis to determine the layers of a protective coating such as paint</i>
MIC	Microscopic <i>Analysis to determine presence and identity of unknown substance (e.g. fingernail scrapings)</i>
IGL	Ignitable Liquids <i>Analysis of liquid substance to determine if substance is flammable</i>
FDA	Fire Debris Analysis <i>Analysis to determine if debris contains an accelerant</i>
FAB	Fabric Impression <i>Analysis of impressions formed when a fabric contacts a hard surface</i>

#### Document Section

QD	Questioned Document <i>Analysis to answer questions about a disputed document; may involve comparison of the questioned document to a set of known standards; most common type involves potential authorship of handwriting.</i>
IP	Ink, Papers, Alterations, and Obliterations <i>Inks can be examined to determine if different inks were used to produce a particular document in question. Inks that have been obliterated or destroyed through fading, burning, water, overwriting, chemicals, or other means can often be recovered and made legible. Paper can be compared with known samples to determine if the document in question is similar to a known sample. Paper can sometimes be dated or traced to a particular source or manufacturer. Alterations and Obliterations exams are performed in order to detect whether a portion of a document has been altered, some portion rendered not readily visible, or some text added.</i>

IND	<p>Indented Writing</p> <p><i>Indented writing is an imprint which may be left on the underlying pages when the top sheet of paper is written upon. This impression of the writing is influenced by pen pressure and thickness of the paper. Indented writing is very useful as a form of connecting evidence, such as tying a robbery note to a writing pad recovered from a suspect.</i></p>
PPM	<p>Paper Physical Match</p> <p><i>Anything that is torn, cut, fractured, snapped, pulled, or ripped apart can be matched back to its congruent counterpart, e.g. matches reconstructed to their match books, shredded or torn documents, cut documents, etc. Paper that has been burned or water soaked can often be restored.</i></p>

## Fingerprint Section

FP	<p>Latent Fingerprint Examination</p> <p><i>There are two exams available within this request, fingerprint processing (FP-P) and fingerprint comparison (FP-C).</i></p> <p><b><u>Fingerprint processing</u></b> cases consist of crime scene evidence from which the print section attempts to develop latent prints. If ridge detail is present, an added fingerprint comparison examination will be added by the laboratory staff. At this time fingerprint processing is the only type of fingerprint exam performed at the SDFL.</p> <p><b><u>Fingerprint comparison</u></b> cases consist of an agency's submitted lifts taken from a crime scene. These lifts are compared to individuals under investigation as well as entered into the AFIS database. At this time, all comparison cases are outsourced to Ron Smith &amp; Associates for completion. Ron Smith &amp; Associates will issue a report to the submitting agency</p>
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## Digital Evidence

DEP	<p>Digital Evidence Preview</p> <p><i>Analysis of digital evidence to see if evidence is present; only specific type of evidence that submitter requests will be looked for (e.g. child porn, text messages). Prelog must be accompanied by Digital Evidence Request for Laboratory Examination (see Attorney General website <a href="http://www.atg.sd.gov">www.atg.sd.gov</a>); (follow DCI link to Forensic Lab link) No CD report of exam is issued. No search warrant or consent forms required.</i></p>
DEA	<p>Digital Evidence Analysis</p> <p><i>Full analysis of digital evidence to include computers, cell phones, digital cameras, etc; only specific type of evidence that submitter requests will be looked for (e.g. child porn, text message). Prelog must be accompanied by Digital Evidence Request for Laboratory Examination (see Attorney General website <a href="http://www.atg.sd.gov">www.atg.sd.gov</a>); (follow DCI link to Forensic Lab link) Search warrant or consent forms required.</i></p>
DEFA	<p>Digital Evidence Field Assist</p> <p><i>Request a digital evidence examiner to assist in a search warrant and/or other field activity on site.</i></p>
DEI	<p>Digital Evidence Image</p> <p><i>Request for copy of examiner's evidence files or suspect's hard drive</i></p>
DEW	<p>Digital Evidence Wipe</p> <p><i>Request for computer hard drive to be wiped completely clean; authorization form required (see Attorney General website <a href="http://www.atg.sd.gov">http://www.atg.sd.gov</a>) (follow DCI link to Forensic Lab link).</i></p>
DERC	<p>Digital Evidence Report Copy</p> <p><i>The request for duplication of an FTK report for an additional distribution</i></p>
DEE	<p>Digital Evidence Video/Audio Enhancement</p> <p><i>Request to enhance media for clarity</i></p>

## Miscellaneous

CRI	Criminalistics <i>A specific analysis type not usually requested, but significant to a specific case. Contact the laboratory to discuss this option.</i>
COM	Compliance w/SDCL <i>Analysis of an item(s) which requires a specific examination that will result in a compliance with any SDCL, such as the weight of gunpowder allowed in pyrotechnics (firecrackers). Also used in conjunction with firearm destruction requests. Court order must accompany all firearm destruction requests, as well as a copy of the negative NCIC check.</i>
PHO	Photograph Media Request <i>Request to photograph specific pieces of evidence as required</i>
NCA	Non Criminal Assist <i>The Non Criminal Assist analysis code is appropriate for use when assistance is required by a department/agency in which a criminal offense did not occur, i.e. recovery of data on an officer's hard drive after a computer malfunction.</i>
BPI	Blood Stain Pattern Interpretation <i>Examination of the shapes, locations, and distribution of patterns of bloodstains, in order to provide an interpretation of the physical events which gave rise to their origin</i>
TP	Tire Print Examination <i>Analysis of either photographs or casts (preferably both) of tire tread marks to determine if patterns of two samples are the same; also to determine if specific tire made a specific print</i>
SHO	Shoe Print Examination <i>Analysis of either photographs or casts (preferably both) of shoe pattern to determine if patterns of two samples are the same; also to determine if specific shoe made a specific print</i>